



Water-Data Report 2008

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°44'26", long 75°15'33" referenced to North American Datum of 1983, Harrison Township, Gloucester County, NJ, Hydrologic Unit 02040202, on right bank 25 ft downstream from bridge on County Route 607 (Tomlin Station Road), 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, May 1965 to April 1966. Continuous-record gaging station, May 1966 to current year.

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is NGVD of 1929. Prior to July 28, 1969, at datum 7.96 ft higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft higher.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Occasional regulation from irrigation upstream of gage. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug 11	0230	*612	*13.13
No other peak greater than base discharge			

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	12	18	19	35	61	29	28	24	29	16	16	14
2	12	17	21	29	106	37	27	24	23	15	16	13
3	12	17	78	26	43	35	24	23	22	14	16	13
4	12	17	31	24	35	32	47	23	91	14	15	13
5	13	17	23	24	32	63	38	22	58	15	14	13
6	13	21	21	26	30	42	37	22	34	15	14	35
7	13	19	19	26	33	35	34	22	28	16	13	58
8	12	18	23	25	29	127	31	21	24	16	13	21
9	14	18	22	24	28	154	30	77	22	15	13	22
10	33	18	24	23	28	54	29	56	21	16	78	31
11	25	18	23	43	25	42	28	31	22	15	324	19
12	22	18	20	49	25	38	29	66	20	14	41	18
13	16	24	23	31	105	35	29	79	19	14	25	26
14	15	21	25	33	111	34	27	36	19	14	22	19
15	14	23	20	30	46	33	26	29	19	14	49	17
16	14	23	97	27	37	35	25	55	19	14	24	16
17	13	19	53	27	34	32	25	47	18	14	20	16
18	13	19	31	73	35	30	25	38	18	14	18	16
19	14	27	27	45	32	40	24	43	19	13	17	15
20	18	25	25	e32	31	69	24	48	18	13	16	16
21	14	22	24	e26	31	41	24	56	17	13	16	17
22	14	20	24	26	33	35	24	35	17	12	15	16
23	14	19	28	28	37	32	24	30	16	24	15	15
24	20	18	36	27	35	30	23	27	16	114	15	15
25	36	19	27	25	34	29	23	25	16	28	15	15
26	42	25	25	24	34	29	22	24	16	19	14	17
27	163	28	27	25	34	29	25	23	16	29	14	18
28	67	22	24	25	29	30	32	30	16	29	14	43
29	28	20	73	24	28	28	37	24	16	19	14	32
30	21	19	43	26	---	27	26	23	16	17	14	17
31	19	---	55	24	---	25	---	28	---	16	14	---
Total	748	609	1,011	932	1,201	1,331	847	1,111	705	611	924	616
Mean	24.1	20.3	32.6	30.1	41.4	42.9	28.2	35.8	23.5	19.7	29.8	20.5
Max	163	28	97	73	111	154	47	79	91	114	324	58
Min	12	17	19	23	25	25	22	21	16	12	13	13
Cfsm	0.90	0.75	1.21	1.12	1.54	1.60	1.05	1.33	0.87	0.73	1.11	0.76
In.	1.03	0.84	1.40	1.29	1.66	1.84	1.17	1.54	0.97	0.84	1.28	0.85

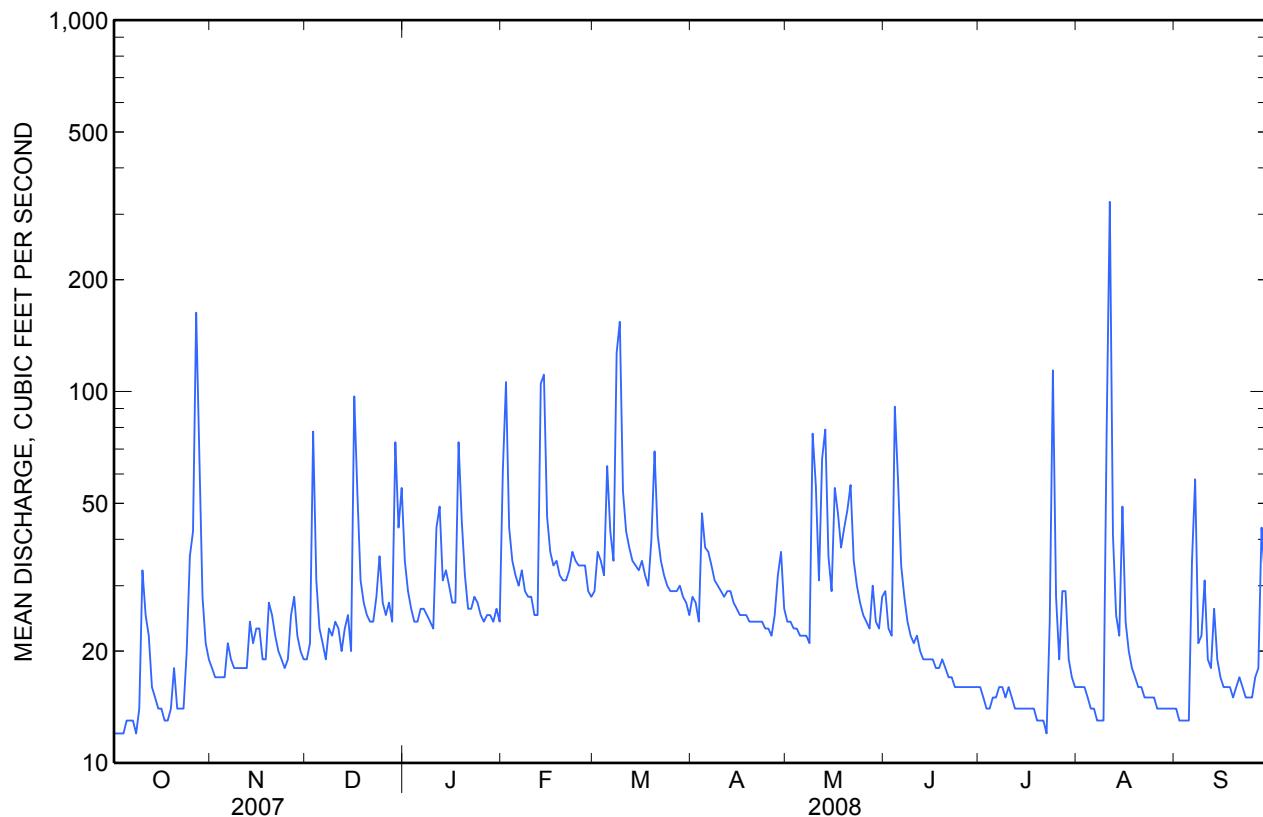
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	28.7	35.0	45.7	49.0	49.3	55.8	52.9	39.9	34.6	31.0	27.2	25.4
Max	65.2	93.9	144	123	115	132	134	72.6	95.5	112	121	71.9
(WY)	(1990)	(1973)	(1997)	(1978)	(1979)	(1994)	(1983)	(1989)	(2003)	(1975)	(1967)	(1971)
Min	13.0	15.3	16.3	20.2	16.5	22.7	21.3	15.9	10.7	6.01	5.89	8.98
(WY)	(1993)	(1999)	(1999)	(2002)	(2002)	(1981)	(1985)	(1977)	(1966)	(1966)	(1966)	(2002)

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2007		Water Year 2008		Water Years 1966 - 2008	
Annual total	15,466		10,646		39.8	
Annual mean	42.4		29.1		64.7	1973
Highest annual mean					16.5	2002
Lowest annual mean						
Highest daily mean	715	Apr 16	324	Aug 11	1,260	Aug 28, 1971
Lowest daily mean	12	Sep 29	12	Many days	2.9	Jul 14, 1966
Annual seven-day minimum	12	Sep 28	12	Oct 1	3.3	Aug 25, 1966
Maximum peak flow			612	Aug 11	3,530	Aug 10, 1967
Maximum peak stage			13.13	Aug 11	^a 17.44	Aug 10, 1967
Instantaneous low flow			11	Oct 1	2.9	Jul 14, 1966
Annual runoff (cfsm)	1.58		1.08		1.48	
Annual runoff (inches)	21.39		14.72		20.08	
10 percent exceeds	67		44		66	
50 percent exceeds	28		24		29	
90 percent exceeds	14		14		14	

^a Adjusted to current datum.



01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

WATER TEMPERATURE: May 1966 to September 1973, daily maximum-minimum; October 1998 to October 2001, recorded hourly.

REMARKS.--Cooperative Network Site Descriptor: Watershed Integrator and Trace Element Assessment (303d) special study site, NJ Department of Environmental Protection Watershed Management Area 18. The samples on Jan 10, Mar 20, and Jun 19 were for the Trace Element Assessment (303d).

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Instan- taneous dis- charge, ft ³ /s (00061)	Turbdty white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt	UV absorb- ance, 280 nm, wat flt	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
Dec									
05...	0900	Surface water, regular	23	7.7	.163	.130	757	13.5	105
Jan									
10...	0830	QC - Artificial, field blank	--	--	--	--	--	--	--
10...	0900	Surface water, regular	23	4.6	--	--	767	10.8	88
Feb									
20...	0930	Surface water, regular	30	5.7	.079	.062	766	13.7	102
Mar									
20...	0945	QC - Artificial, field blank	--	--	--	--	--	--	--
20...	1000	Surface water, regular	86	26	--	--	751	9.5	85
May									
06...	0930	Surface water, regular	22	5.6	.156	.128	760	8.5	84
Jun									
19...	0815	QC - Artificial, field blank	--	--	--	--	--	--	--
19...	0830	Surface water, regular	19	5.8	--	--	760	5.6	56
Aug									
04...	1000	Surface water, regular	15	4.1	.119	.095	761	5.2	58

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specif-										ANC,		
	pH, water, unfltrd field, std units (00400)	conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (25 degC)	Temper- ature, water, deg C (00020)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, filtrd, mg/L (00900)	Magnes- ium, water, filtrd, mg/L (00915)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L as SiO2 (00955)
Dec 05...	7.6	239	2.0	2.9	77	23.5	4.32	4.68	11.0	29	24.5	.13	10.6
Jan 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	7.6	241	2.5	6.3	--	--	--	--	--	--	--	--	--
Feb 20...	7.3	242	4.0	3.9	75	19.3	6.53	4.40	11.1	23	26.0	E.09	8.6
Mar 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	7.1	188	8.5	10.0	--	--	--	--	--	--	--	--	--
May 06...	7.4	230	16.5	15.0	77	23.1	4.73	3.89	9.99	37	21.6	.18	9.4
Jun 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	7.4	234	16.0	17.8	--	--	--	--	--	--	--	--	--
Aug 04...	7.4	233	23.5	20.5	75	20.3	5.81	4.99	9.84	40	23.9	.14	10.1

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Sulfate water, filtrd, mg/L (00945)	Residue water, filtrd, sum of consti- tuents mg/L (70301)	Residue on evap. 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia		Nitrate + nitrite water, filtrd, mg/L as N (00623)	Ammonia + nitrite water, filtrd, mg/L as N (00608)	Partic- ulate nitro- gen, filtrd, susp, water, mg/L as N (00631)	Total nitro- gen, water, filtrd, mg/L (49570)	Total nitro- gen, water, unfiltrd, mg/L (00602)	Ortho- phos- phate, water, filtrd, mg/L as P (00671)	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd mg/L as P (00665)
Dec 05...	34.7	136	144	5	.28	.054	1.12	.06	1.4	1.5	.013	.039	.094	
Jan 10...	--	--	--	--	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	--	--	--	--	
Feb 20...	28.8	E136	132	5	.27	.025	3.83	E.03	4.1	E4.1	E.009	.029	.061	
Mar 20...	--	--	--	--	--	--	--	--	--	--	--	--	--	
20...	--	--	--	--	--	--	--	--	--	--	--	--	--	
May 06...	26.9	129	156	1	.32	.055	1.47	E.04	1.8	E1.8	.025	.077	.116	
Jun 19...	--	--	--	--	--	--	--	--	--	--	--	--	--	
19...	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug 04...	20.7	130	181	1	.57	.035	2.21	E.02	2.8	E2.8	.016	.029	.087	

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Total carbon, suspd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspd sedimnt total, mg/L (00688)	Organic carbon, suspd sedimnt total, mg/L (00689)	Organic water, filtrd, mg/L (00681)	Boron, water, filtrd, μg/L (01020)	Silver, water, filtrd, μg/L (01075)	Silver, unfltrd recover- able, μg/L (01077)
Dec							
05...	.8	<.04	.8	3.6	27	--	--
Jan							
10...	--	--	--	--	--	<.1	--
10...	--	--	--	--	--	<.1	<.02
Feb							
20...	.2	<.04	.2	1.8	33	--	--
Mar							
20...	--	--	--	--	--	<.1	--
20...	--	--	--	--	--	<.1	<.02
May							
06...	.3	<.04	.3	3.0	31	--	--
Jun							
19...	--	--	--	--	--	<.1	--
19...	--	--	--	--	--	<.1	<.02
Aug							
04...	.2	<.04	.2	2.7	34	--	--